



The WatchKeeper[™] Met Ocean Buoy is a versatile data collection buoy for large lakes, rivers, harbours, and coastal water deployments.



- » Real-time meteorological, oceanographic and water quality data
- » Low operational costs
- » Easy to deploy and service
- » Expandable to allow new sensors
- » Supports a variety of telemetry options
- » Monitor and control from your office





WATCHKEEPER™ Met Ocean Buoy

The WatchKeeper[™] hull is a rugged, lightweight environmental monitoring buoy that maintains all the features and requirements for navigation aids.

The WatchKeeper hull is based on an SB-138P Sentinel® buoy contructed of medium density UV stabilized polyethylene rotationally moulded to form a seamless 9.5mm thick hull filled with polystyrene foam. Colour pigment is blended into the polyethylene eliminating the need for painting. These buoys are in use worldwide as navigation aids.

WatchKeeper[™] can be outfitted with a wide range of sensors for monitoring weather, air and water quality, waves and other parameters in coastal areas, lakes and rivers.

WatchKeeper[™] is the standard lightweight, environmental monitoring buoy used by Environment Canada.

Specifications

HULL CONSTRUCTION

Rotationally moulded polyethylene. Internally cross-braced with stainless steel rods and connected to stainless steel bushings in the mooring and lifting eyes to achieve maximum long-term strength. The hull is also filled with expanded polystyrene foam at 16kg/m³ to prevent water ingress in the event of hull damage.

• FINISH Colour pigment blended into polyethylene. No painting required.

• BALLAST

Concrete (internal)

- WEIGHT Approximately 540Kg loaded with typical sensors, WatchMan500 payload and batteries
- DIMENSIONS 1.7m diameter Anemometer height 3.3m
- MOORING Inverse catenary, chain, semi-taut, or false bottom
- NAVIGATION AIDS
 IALA standard lamp
 Radar reflector
 AlS transponder

• ELECTRONICS

AXYS WatchMan500[™] data acquisition and processing system

TYPICAL SENSORS

Wind speed, wind direction, air temperature/relative humidity, solar radiation, barometric pressure, wave height, direction and period, current speed and direction, GPS, compass, CTD, radiation and water quality sonde.

• TELEMETRY OPTIONS

- UHF/VHF
- INMARSAT IsatData Pro
- IRIDIUM
- GPRS/HSPA
- CDMA/EVDO

• POWER

Fully solar powered. Four 20W solar panels, 400 to 500 amp hour battery capacity.

POSITION

GPS package indicates whether buoy is onstation WatchCircle Alarm Position Verification

Applications

- Weather forecasting
- Oceanographic research
- Environmental monitoring

- Marine and coastal engineering
- Marine traffic safety
- Climate studies

